

REMARKS

BEST AVAILABLE COPY

Response to §102(e) Rejection of Claims 1-3 and 5-9

In the outstanding Office Action, the Examiner rejected previously allowed claims 1-3 and 5-9 as allegedly anticipated by U.S. Patent No. 6,815,329 to Babich et al. (hereinafter "Babich"). Specifically, the Examiner referred to column 5, lines 1-50 and column 6, lines 11-14 of Babich and asserted that Babich discloses dielectric sidewall spacers formed of a material selected from the group consisting of SiCH, SiCOH, SiC, and SiO<sub>2</sub> (see Office Action, page 3, lines 16-17).

Applicants respectfully disagree with the Examiner's assertion.

Babich discloses at column 6, lines 11-14 that the dielectric sidewall spacers 140 are formed by a solid sidewall spacer material and that the overlying bridge layers 150 are formed by one or more solid dielectrics. Babich further discloses at column 5, lines 20-25 that the solid dielectrics are selected from the group consisting of silicon-containing materials such as SiO<sub>2</sub>, SiC, SiCO, SiCOH, SiCH, etc.

However, nothing in Babich teaches or suggests that the dielectric sidewall spacers 140 are formed by the same material, i.e., solid dielectrics such as SiO<sub>2</sub>, SiC, SiCO, SiCOH, SiCH, etc., that forms the overlying bridge layers 150.

Therefore, the Examiner's assertion that Babich discloses dielectric sidewall spacers formed of a material selected from the group consisting of SiCH, SiCOH, SiC, and SiO<sub>2</sub> is based on an improper extrapolation of the teachings of Babich, which is not supported by the disclosure of Babich in any manner.

Babich fails to disclose in any manner the specific dielectric materials used for forming the sidewall spacers 140, and it therefore cannot anticipate the rigid dielectric sidewall spacers that "are of a material selected from the group consisting of SiCH, SiCOH, and SiO<sub>2</sub>," as positively recited by claims 1-3 and 5-9 of the present application.

**BEST AVAILABLE COPY****Response to §103(a) Rejection of Claims 1-3 and 5-9**

In the outstanding Office Action, the Examiner also rejected claims 1-3 and 5-9 as allegedly obvious over U.S. Patent No. 6,284,657 to Chooi et al. (hereinafter "Chooi") in view of Babich.

Applicants respectfully traverse the Examiner's obviousness rejections, for the following reasons:

First, claim 1, from which claims 2-3 and 5-9 depend, has been amended herein to positively recite rigid dielectric sidewall spacers that "are of a material selected from the group consisting of SiCH<sub>3</sub>, SiCOH, and SiO<sub>2</sub>." Support for such claim amendments can be found in the instant specification on page 7, paragraph [0023].

The Chooi reference only discloses dielectric sidewall spacers 19 that are formed from a non-metallic layer 15 comprising a material such as silicon carbide, boron nitride, carbon nitride, boron carbon nitride, or boron carbide (see Chooi, column 6, lines 21-50). However, nothing in Chooi discloses or suggests that the dielectric sidewall spacers 19 or the non-metallic layer 15 may comprise a material selected from the group consisting of SiCH<sub>3</sub>, SiCOH, and SiO<sub>2</sub>, as positively recited by claims 1-3 and 5-9 of the present invention.

The Babich reference fails to disclose dielectric sidewall spacers formed of SiCH<sub>3</sub>, SiCOH, and SiO<sub>2</sub>, as mentioned hereinabove, and Babich therefore does not remedy the deficiency of Chooi.

Second, the Examiner has expressly conceded in the January 5, 2006 Office Action that Chooi fails to disclose: (1) a first metal line located within a lower low-k dielectric, (2) a lower low-k dielectric having a dielectric constant ranging from about 1.0 to about 3.5 and comprising low-k polymers or low-k carbon doped oxides, and (3) a lower metal wiring layer comprising a rigid insulating layer deposited atop the lower low-k dielectric. Nevertheless, the Examiner attempted to remedy such deficiencies of Chooi by citing Babich.

It is noted that Babich qualifies as prior art only under 35 U.S.C. §102(e), and the subject matter of the Babich patent and the claimed invention of the present application were owned by the same person, i.e., International Business Machines Corporation, at the time the claimed invention of the present application was made.

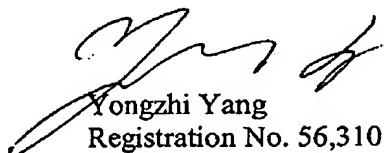
**BEST AVAILABLE COPY**

Under the provision of 35 U.S.C. §103(c), the Babich reference cannot be used to preclude the patentability of the claimed invention of the present application.

Based on the foregoing, Applicants respectfully request the Examiner to reconsider, and upon reconsideration to withdraw, the rejections of claims 1-3 and 5-9 of the present application. Issue of a Notice of Allowance for the application is correspondingly requested.

If any issues remain outstanding, incident to the formal allowance of the application, the Examiner is requested to contact the undersigned attorney at (516) 742-4343 to discuss same, in order that this application may be allowed and passed to issue at an early date.

Respectfully submitted,



Yongzhi Yang  
Registration No. 56,310

SCULLY, SCOTT, MURPHY & PRESSER, P.C.  
400 Garden City Plaza, Ste. 300  
Garden City, New York 11530  
(516) 742-4343  
Customer No.: 23389  
LSS/MY:vh